

CLAIMS

What is claimed is:

1. A method comprising:
  - 2 broadcasting a synchronization signal from a wireless access point device indicating a mode of operation and available network services; and
    - 5 establishing a connection between a non-authorized mobile device and the access point device.
- 1 2. The method of claim 1 further comprising:
  - 3 wirelessly transmitting a synchronization signal to indicate a mode of operation and available network services; receiving a request for connection establishment from the non-authorized mobile device;
    - 6 receiving a request for access to a selected network service, from among the available network services, from the non-authorized mobile device; and
      - 9 allowing the non-authorized mobile device access to the selected network service.
- 1 2. The method of claim 1 wherein the available network services includes free public network services.
- 1 2. The method of claim 1 wherein the available network services includes pay-per-use public network services.
- 1 2. The method of claim 4 further comprising:
  - 3 providing a form of payment for a pay-per-use network service.
- 1 2. The method of claim 5 wherein the form of payment is a credit card number.

1       7. The method of claim 5 wherein the form of payment is a  
2       prepaid payment number.

1       8. The method of claim 5 further comprising:  
2               providing a secure transmission of information between  
3               the non-authorized mobile device and the access point device.

1       9. The method of claim 5 further comprising:  
2               sending payment information from the non-authorized  
3               mobile device to the access point device wirelessly.

1       10. The method of claim 5 further comprising:  
2               validating the payment information provided by the non-  
3               authorized mobile device; and  
4               providing the validation results to the non-authorized  
5               mobile device.

1       11. The method of claim 10 further comprising:  
2               establishing a connection between the non-authorized  
3               mobile device to a selected network service only if payment  
4               validation successful.

1       12. The method of claim 11 further comprising:  
2               disconnecting the non-authorized mobile device from a  
3               selected network service, from among the available network  
4               services, if payment expires.

1       13. The method of claim 1 further comprising:  
2               performing data exchanges between the non-authorized  
3               mobile device and a selected network service, from among the  
4               available network services, through the access point.

1       14. The method of claim 1 further comprising:

2 disconnecting the non-authorized mobile device from the  
3 access point device to terminate access to the available  
4 network services.

1 15. The method of claim 1 wherein connection establishment  
2 uses any authentication procedure performed in accordance with  
3 the Electrical and Electronics Engineers (IEEE) Standard  
4 802.11 Specification or its supplements.

1 16. A machine-readable medium having one or more instructions  
2 for enabling a non-authorized user to wirelessly access a  
3 number of network services, which when executed by a  
4 processor, causes the processor to perform operations  
5 comprising:

6 wirelessly transmitting a synchronization signal  
7 indicating a mode of operation and available network services;  
8 receiving a request for connection establishment from a  
9 non-authorized user;  
10 establishing a connection with the non-authorized user;  
11 receiving a request for access to a selected network  
12 service, from among the available network services, by the  
13 non-authorized user; and  
14 providing the non-authorized user access to the selected  
15 network service.

1 17. The machine-readable medium of claim 16 further  
2 comprising:  
3 requesting a form of payment from the non-authorized user  
4 for access to pay-per-use network services.

1 18. The machine-readable medium of claim 17 further  
2 comprising:  
3 validating the payment information provided by the non-  
4 authorized user.

1       19. The method of claim 18 further comprising:  
2                  disconnecting the non-authorized mobile device from the  
3 selected network service if payment expires.

1       20. The method of claim 16 further comprising:  
2                  performing data exchanges between the non-authorized user  
3 and the selected network service.

1       21. An apparatus comprising:  
2                  a transceiver port for wirelessly communicating with  
3 mobile devices;  
4                  a network communications port communicatively coupled to  
5 the transceiver port, the network communications port for  
6 coupling to a network; and  
7                  a control unit coupled to the transceiver port and the  
8 network communications port, the control unit configured to  
9 control access from the transceiver port to the network  
10 communications port and provide at least two modes of  
11 operation, a first mode of operation to provide authorized  
12 mobile devices access to the network communications port, and  
13 a second mode of operation to provide non-authorized mobile  
14 devices access to the network communications port.

1       22. The apparatus of claim 21 wherein any one of the operation  
2 modes can be dynamically enabled or disabled.

1       23. The apparatus of claim 21 wherein in the first mode of  
2 operation a specific authentication process is requested from  
3 the mobile devices to obtain full network access over the  
4 network communications port and in the second mode of  
5 operation no specific authentication process is requested from  
6 the mobile devices to obtain certain network access over the  
7 network communications port.

1       24. The apparatus of claim 21 wherein the second mode of  
2       operation allows the non-authorized mobile devices to obtain  
3       public network access through the network communication port.

1       25. The apparatus of claim 21 wherein the control unit is  
2       configured to provide secure services to both authorized and  
3       non-authorized mobile devices.

1       26. The apparatus of claim 21 wherein the control unit is  
2       configured to provide data exchange to both authorized and  
3       non-authorized mobile devices in accordance with the  
4       Electrical and Electronics Engineers (IEEE) 802.11 Standard.

1       27. The apparatus of claim 21 wherein the control unit is  
2       configured to provide a third mode of operation, the third  
3       mode of operation provides authorized mobile devices access to  
4       the network communications port and non-authorized mobile  
5       devices limited access to the network communications port  
6       simultaneously.